## C300-NMNM

#### **Base Product**

CNT-300 CNT® Jumper with interface types N Male and N Male, variable length

#### Product Classification

Product Type		Braided cable assembly		
Product Brand		CNT®		
Product Series		CNT-300		
General Specifications				
Attachment, Connector A		Factory attached		
Attachment, Connector B		Factory attached		
Body Style, Connector A		Straight		
Body Style, Connector B		Straight		
Cable Family		CNT-300		
Interface, Connector A		N Male		
Interface, Connector B		N Male		
Specification Sheet Revision Level		A		
Variable Length		For custom lengths contact 828-324-2200 or 1-800-982-1708 (toll free), or your local CommScope representative		
Dimensions				
Length		0 m   0 ft		
Nominal Size		0.300 in		
VSWR/Return Loss				
Frequency Band	VSWR	Return Loss (dB)		
700–3000 MHz	1.433	14.99		

### Jumper Assembly Sample Label

Page 1 of 20



# C300-NMNM



### Regulatory Compliance/Certifications

#### Classification

ISO 9001:2015

Agency

Designed, manufactured and/or distributed under this quality management system

#### Included Products

300APNM-C	-	Type N Male for CNT-300 braided cable
CNT-300	-	CNT-300, CNT® 50 Ohm Braided Coaxial Cable, black PE jacket
CNT-300-SFR	-	CNT-300-SFR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, Class B2ca, -s1a, d1, a1
CNT-300A	-	CNT-300, CNT® 50 Ohm Braided Coaxial Cable, black PE jacket
CNT-300A-LB	-	CNT-300, CNT® 50 Ohm Low Braided Coverage Coaxial Cable, black non-halogenated jacket
CNT-300A-SFR	-	CNT-300A-SFR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, Class B2ca, -s1a, d1, a1

Page 2 of 20





### Product Classification

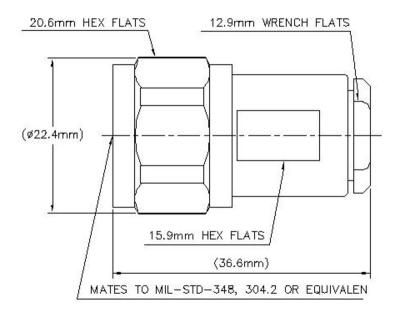
Product Type	Braided cable connector
Product Brand	CNT®
General Specifications	
Body Style	Straight
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Gold
Interface	N Male
Outer Contact Attachment Method	Clamp
Outer Contact Plating	Trimetal
Dimensions	
Width	20.62 mm   0.812 in
Length	36.64 mm   1.443 in
Diameter	22.35 mm   0.88 in
Nominal Size	0.300 in

## Outline Drawing

Type N Male for CNT-300 braided cable

Page 3 of 20





### **Electrical Specifications**

Insertion Loss, typical	0.05 dB
Average Power at Frequency	360.0 W @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	2000 V
Inner Contact Resistance, maximum	1 m0hm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	0.25 m0hm
Peak Power, maximum	10 kW
RF Operating Voltage, maximum (vrms)	707 V

### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0-3000 MHz	1.065	30.04
3000-6000 MHz	1.222	20.01

### Mechanical Specifications

**Connector Retention Tensile Force** 

220 N | 49.458 lbf



Connector Retention Torque	0.45 N-m   3.983 in lb
Coupling Nut Proof Torque	1.7 N-m   15.046 in lb
Coupling Nut Proof Torque Method	IEC 61169-16:9.3.6
Coupling Nut Retention Force	450 N   101.164 lbf
Coupling Nut Retention Force Method	IEC 61169-16:9.3.11
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-16:9.5
Mechanical Shock Test Method	IEC 60068-2-27

#### **Environmental Specifications**

Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Storage Temperature	-65 °C to +125 °C (-85 °F to +257 °F)
Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F
Average Power, Inner Conductor Temperature	100 °C   212 °F
Climatic Sequence Test Method	IEC 60068-1
Corrosion Test Method	IEC 60068-2-11
Damp Heat Steady State Test Method	IEC 60068-2-3
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
Thermal Shock Test Method	IEC 60068-2-14
Vibration Test Method	IEC 60068-2-6

#### Packaging and Weights

Weight, net

57.62 g | 0.127 lb

#### Regulatory Compliance/Certifications

Agency
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Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

#### \* Footnotes

**Insertion Loss, typical** 0.05√<sup>−</sup>freq (GHz) (not applicable for elliptical waveguide)

Page 5 of 20



**Immersion Depth** 

Immersion at specified depth for 24 hours

Page 6 of 20



# CNT-300

CNT-300, CNT® 50 Ohm Braided Coaxial Cable, black PE jacket



#### Product Classification

Product Type	Braided coaxial cable
Product Brand	CNT®
Product Series	CNT-300
General Specifications	
Braid Coverage	87 %
Cable Type	CNT-300
Jacket Color	Black
Dimensions	
Diameter Over Dielectric	4.83 mm   0.19 in
Diameter Over Jacket	7.62 mm   0.3 in
Diameter Over Tape	5.003 mm   0.197 in
Inner Conductor OD	1.78 mm   0.07 in
Outer Conductor OD	5.66 mm   0.223 in
Nominal Size	0.300 in
Electrical Specifications	
Cable Impedance	50 ohm
Capacitance	80.4 pF/m   24.506 pF/ft
dc Resistance, Inner Conductor	6.96 ohms/km   2.121 ohms/kft
dc Resistance, Outer Conductor	8.5 ohms/km   2.591 ohms/kft
dc Test Voltage	2500 V
Jacket Spark Test Voltage (rms)	3500 V

Page 7 of 20



# CNT-300

Maximum Frequency	24.5 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	10 kW
Shielding Effectiveness	90 dB
Velocity	83 %

### Material Specifications

Braid Material	Tinned copper
Dielectric Material	Foam PE
Jacket Material	PE
Inner Conductor Material	Copper
Shield Tape Material	Aluminum

### Mechanical Specifications

Minimum Bend Radius, single Bend	22.352 mm   0.88 in
Tensile Strength	55 kg   121.254 lb
Bending Moment	0.5 N-m   4.425 in lb
Flat Plate Crush Strength	0.5 kg/mm   27.999 lb/in

#### **Environmental Specifications**

Installation temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)

### Packaging and Weights

Cable weight	0.06 kg/m   0.04 lb/ft
Packaging Type	Reel

### Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant

Page 8 of 20



# <u>CNT-300</u>



Compliant

Page 9 of 20



# CNT-300-SFR



CNT-300-SFR, CNT® 50 Ohm Braided Coaxial Cable, black nonhalogenated, fire retardant polyolefin jacket, Class B2ca, -sla, dl, al

#### Product Classification

Product Type	Braided coaxial cable
Product Brand	CNT®
Product Series	CNT-300
General Specifications	
Braid Coverage	87 %
Cable Type	CNT-300
Jacket Color	Black
Dimensions	
Diameter Over Dielectric	4.83 mm   0.19 in
Diameter Over Jacket	7.62 mm   0.3 in
Diameter Over Tape	5.003 mm   0.197 in
Inner Conductor OD	1.78 mm   0.07 in
Outer Conductor OD	5.66 mm   0.223 in
Nominal Size	0.300 in
Electrical Specifications	
Cable Impedance	50 ohm

	80 0mm
Capacitance	80.4 pF/m   24.506 pF/ft
dc Resistance, Inner Conductor	6.96 ohms/km   2.121 ohms/kft
dc Resistance, Outer Conductor	8.5 ohms/km   2.591 ohms/kft
dc Test Voltage	2500 V
Jacket Spark Test Voltage (rms)	3500 V

Page 10 of 20



# CNT-300-SFR

Maximum Frequency	24.5 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	10 kW
Shielding Effectiveness	90 dB
Velocity	83 %
Material Specifications	
Braid Material	Tinned copper
Dielectric Material	Foam PE
Jacket Material	Non-halogenated, fire retardant polyolefin
Inner Conductor Material	Copper
Shield Tape Material	Aluminum
Mechanical Specifications	
Minimum Bend Radius, single Bend	22.352 mm   0.88 in

Tensile Strength	55 kg   121.254 lb
Bending Moment	0.5 N-m   4.425 in lb
Flat Plate Crush Strength	0.5 kg/mm   27.999 lb/in

### Environmental Specifications

Packaging Type

Installation temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	sla
EN50575 CPR Cable EuroClass Droplets Rating	d0
EN50575 CPR Cable EuroClass Acidity Rating	a1
Smoke Index Test Method	IEC 61034
Toxicity Index Test Method	IEC 60754-2
Packaging and Weights	
Cable weight	0.06 kg/m   0.04 lb/ft

Page 11 of 20

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Reel



# CNT-300-SFR

### Regulatory Compliance/Certifications

#### Agency Classification

CENELECEN 50575 compliant, Declaration of Performance (DoP) availableISO 9001:2015Designed, manufactured and/or distributed under this quality management system

CENELEC

Page 12 of 20



# CNT-300A

CNT-300, CNT® 50 Ohm Braided Coaxial Cable, black PE jacket



### Product Classification

Product Type	Braided coaxial cable
Product Brand	CNT®
Product Series	CNT-300
General Specifications	
Braid Coverage	87 %
Cable Type	CNT-300
Jacket Color	Black
Dimensions	
Diameter Over Dielectric	4.83 mm   0.19 in
Diameter Over Jacket	7.62 mm   0.3 in
Diameter Over Tape	5.003 mm   0.197 in
Inner Conductor OD	1.78 mm   0.07 in
Outer Conductor OD	5.66 mm   0.223 in
Nominal Size	0.300 in
Electrical Specifications	
Cable Impedance	50 ohm
Capacitance	80.4 pF/m   24.506 pF/ft
dc Resistance, Inner Conductor	11.05 ohms/km   3.368 ohms/kft
dc Resistance, Outer Conductor	8.5 ohms/km   2.591 ohms/kft
dc Test Voltage	2500 V

Jacket Spark Test Voltage (rms) 3500 V

Page 13 of 20



# CNT-300A

Maximum Frequency	24.5 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	10 kW
Shielding Effectiveness	90 dB
Velocity	83 %

### Material Specifications

Braid Material	Tinned copper
Dielectric Material	Foam PE
Jacket Material	PE
Inner Conductor Material	Copper-clad aluminum wire
Shield Tape Material	Aluminum

### Mechanical Specifications

Minimum Bend Radius, single Bend	22.352 mm   0.88 in
Tensile Strength	23 kg   50.706 lb
Bending Moment	0.5 N-m   4.425 in lb
Flat Plate Crush Strength	0.5 kg/mm   27.999 lb/in

#### **Environmental Specifications**

Installation temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)

### Packaging and Weights

Cable weight	0.06 kg/m   0.04 lb/ft
Packaging Type	Reel

### Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant

Page 14 of 20



# <u>CNT-3</u>00A



Compliant

Page 15 of 20



# CNT-300A-LB



CNT-300, CNT® 50 Ohm Low Braided Coverage Coaxial Cable, black non-halogenated jacket

#### Product Classification

Product Type	Braided coaxial cable
Product Brand	CNT®
Product Series	CNT-300
General Specifications	
Braid Coverage	60 %
Cable Type	CNT-300
Jacket Color	Black
Dimensions	
Diameter Over Dielectric	4.83 mm   0.19 in
Diameter Over Jacket	7.62 mm   0.3 in
Diameter Over Tape	5.003 mm   0.197 in
Inner Conductor OD	1.78 mm   0.07 in
Nominal Size	0.300 in
Electrical Specifications	
Cable Impedance	50 ohm
Capacitance	80.4 pF/m   24.506 pF/ft
dc Resistance, Inner Conductor	11.05 ohms/km   3.368 ohms/kft
dc Resistance, Outer Conductor	14.95 ohms/km   4.557 ohms/kft
dc Test Voltage	2500 V
Jacket Spark Test Voltage (rms)	3500 V
Maximum Frequency	24.5 GHz

Page 16 of 20



# CNT-300A-LB

Operating Frequency Band	30 – 6000 MHz
Peak Power	10 kW
Shielding Effectiveness	85 dB
Velocity	83 %

### Material Specifications

Braid Material	Tinned copper
Dielectric Material	Foam PE
Jacket Material	Non-halogenated PE
Inner Conductor Material	Copper-clad aluminum wire
Shield Tape Material	Aluminum

### Mechanical Specifications

Minimum Bend Radius, single Bend	22.352 mm   0.88 in
Tensile Strength	20 kg   44.092 lb
Bending Moment	0.3 N-m   2.655 in lb
Flat Plate Crush Strength	0.5 kg/mm   27.999 lb/in

### **Environmental Specifications**

Installation temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)

#### Packaging and Weights

Cable weight	0.05 kg/m   0.034 lb/ft
Packaging Type	Reel

### Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

Page 17 of 20

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**COMMSCOPE**°

# CNT-300A-SFR



CNT-300A-SFR, CNT® 50 Ohm Braided Coaxial Cable, black nonhalogenated, fire retardant polyolefin jacket, Class B2ca, -sla, dl, al

#### Product Classification

Product Type	Braided coaxial cable
Product Brand	CNT®
Product Series	CNT-300
General Specifications	
Braid Coverage	87 %
Cable Type	CNT-300
Jacket Color	Black
Dimensions	
Diameter Over Dielectric	4.83 mm   0.19 in
Diameter Over Jacket	7.62 mm   0.3 in
Diameter Over Tape	5.003 mm   0.197 in
Inner Conductor OD	1.78 mm   0.07 in
Outer Conductor OD	5.66 mm   0.223 in
Nominal Size	0.300 in
Electrical Specifications	
Cable Impedance	50 ohm
Capacitance	80.4 pF/m   24.506 pF/ft

•	
Capacitance	80.4 pF/m   24.506 pF/ft
dc Resistance, Inner Conductor	11.05 ohms/km   3.368 ohms/kft
dc Resistance, Outer Conductor	8.5 ohms/km   2.591 ohms/kft
dc Test Voltage	2500 V
Jacket Spark Test Voltage (rms)	3500 V

Page 18 of 20



# CNT-300A-SFR

Maximum Frequency	24.5 GHz	
Operating Frequency Band	30 – 6000 MHz	
Peak Power	10 kW	
Shielding Effectiveness	90 dB	
Velocity	83 %	
Material Specifications		
Braid Material	Tinned copper	
Dielectric Material	Foam PE	
Jacket Material	Non-halogenated, fire retardant polyolefin	
Inner Conductor Material	Copper-clad aluminum wire	
Shield Tape Material	Aluminum	
Mechanical Specifications		
Minimum Bend Radius, single Bend	22.352 mm   0.88 in	
Tensile Strength	23 kg   50.706 lb	
Bending Moment	0.5 N-m   4.425 in lb	
Flat Plate Crush Strength	0.5 kg/mm   27.999 lb/in	

### Environmental Specifications

Packaging Type

Installation temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	sla
EN50575 CPR Cable EuroClass Droplets Rating	d0
EN50575 CPR Cable EuroClass Acidity Rating	a1
Smoke Index Test Method	IEC 61034
Toxicity Index Test Method	IEC 60754-2
Packaging and Weights	
Cable weight	0.06 kg/m   0.04 lb/ft

Page 19 of 20

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Reel



# CNT-300A-SFR

### Regulatory Compliance/Certifications

#### Agency Classification

CENELECEN 50575 compliant, Declaration of Performance (DoP) availableISO 9001:2015Designed, manufactured and/or distributed under this quality management system

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Page 20 of 20

